## Abstract

An insert molding method comprising an insert molding step of separately preheating an insert member and a mold, and injecting a molten resin; a step of holding a molding in the mold; and a step of gradually cooling at room temperature after taking the molding form the mold is provided. This method realizes a molding free from resin crack and having excellent environmental resistance. Thus, an insert molding method having high general-purpose properties and excellent prevention of resin crack and close contact properties, and a molding using the method are provided.

Further, a method of coating a metal gear surface with a resin by injection molding a molten resin in a state that metal gears and a mold for molding are separately heated to the respective predetermined temperature, and a novel technical means that can realize resin-coated gears free from resin crack and the like even during use under non-lubrication even after molding, and having excellent strength, rigidity, accuracy, impact resistance, fatigue resistance, noise reducing properties, and wear resistance are provided.